SOP NO. SG070A

Attachment 4

DOCUMENT CONTROL CHECK SHEET

Media:

Air	RCRA	Water	Other specify

Activity Number: N/A   MOD985805464

Facility/Site Name and Location: Gloe Graphics Inc. d/b/a Rosse Lithographing Inc.

: 2100 Wyandotte, 2nd floor KC, MO 64108

State:

IA	KS	MO	NE

The following documents pertaining to this activity are contained in this package:

Document		Pages	Yes	No	NA
Final Report w/attachments	includes photo log & photos	214 Pages	( )	( )	( )
Field Sheets		Φ Pages	( )	( )	(✓)
Chain-of-Custody Records		Φ Pages	( )	( )	(✓)
Field Notes		Φ Pages	( )	( )	(✓)
Analytical Data Sheets		Φ Pages	( )	( )	(✓)
Photographic Negatives		3 pages	(✓)	( )	( )
Photographs (not included w/report)		Φ	( )	( )	( )
Preinspection Packet		Φ Pages	( )	( )	(✓)
Other Documents (list below)			(✓)	( )	( )

List of Staff for Alma — 1 Pages

Executive Summary for Engineering Evaluation/Cost Analysis PCB The Site — 15 Pages

" " for EE/CA for PCB The — 14 Pages

(Note: If additional space is needed to list specific documents, utilize reverse side.)

CERTIFICATION

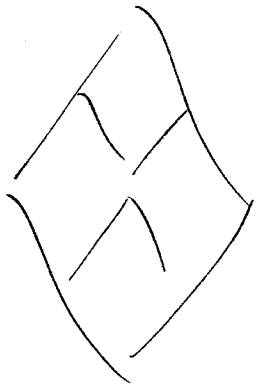
I, the undersigned, certify that all of the documents pertaining to this activity that were in my possession have been listed above and were included in this package at the time this statement was signed.

Alma Moreno Zuchen
Activity Leader's Signature

9/28/2000
Date Signed

LIST OF ● STUFF FOR AL●A

- PROCESS - FACILITY MAP.
- ~~EMERGENCY COORDINATOR~~



- SILVER RECLAMATION AGREEMENT ↓ NEW / USED
- MANIFEST SUMMARY REPORT 9 - 9.30.99 ● } QUARTERLY
  10 - 12.31.99
- SOLVENT RECOVERY CORP. ✓ USAGE PULL DETAIL

MILLENEUM / WHAT DO THEY DO WITH WASTE STREAMS.

MSDS FOR MACHINE OIL / FLOURESCENT LAMPS / DOW THERM

~~✓ CONDITION OF USED OIL~~

WHAT IS "WATER BASED COOLANT" ? CODY / AQUEAS COATING

INK — MSDS ON ALL BASE COLORS
— NEED LIST OF PIGMENT MSDS FOR HAZARDOUS

✓ WITH CODY ABOUT COMB - (C3066-01) LIQUID SOLVENT
(C3066-06) WATER BASE COOLANT / AQUEAS COAT

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VII
901 NORTH 5TH STREET
KANSAS CITY, KANSAS 66101

MEMORANDUM

SUBJECT: Executive Summary for the Engineering Evaluation/Cost Analysis
PCB Treatment, Inc. Site, 2100 Wyandotte Street, Kansas City, Missouri

FROM: Paul Roemerman, Regional Project Manager
Missouri/Kansas Remedial Branch

Pauletta France-Isetts, Regional Project Manager
Missouri/Kansas Remedial Branch

THRU: Steve Kovac, Chief
Missouri/Kansas Remedial Branch

TO: Michael J. Sanderson, Director
Superfund Division

Attached is the Executive Summary for the Engineering Evaluation/Cost Analysis (EE/CA) for the PCB Treatment, Inc., site located at 2100 Wyandotte Street, Kansas City, Missouri. The EE/CA Executive Summary recommends demolition and disposal of the contaminated seven-story structure and excavation and disposal of exterior soils contaminated with polychlorinated biphenyls (PCBs) as the most efficient and cost-effective method to accomplish the objectives of protecting human health and the environment. This recommendation is based on information contained in the Administrative Record for the site.

The recommended response action is protective of public health, welfare, and the environment and complies with federal and state of Missouri requirements to the extent practicable and is cost effective. The state of Missouri concurs on the proposed response action.

We recommend demolition and disposal of the contaminated seven-story structure and excavation and disposal of exterior soils contaminated with PCBs, and that the EE/CA be released for public comment.

Attachment

☑ Approved

☐ Disapproved

6-7-00

Michael J. Sanderson
Director
Superfund Division
U.S. EPA, Region VII

Date

EXECUTIVE SUMMARY
PCB TREATMENT, INC. SITE
2100 WYANDOTTE
KANSAS CITY, MISSOURI

EPA Announces Proposed Removal Action Plans

This document identifies the preferred option for cleaning up the contamination in the PCB Treatment, Inc facility located at 2100 Wyandotte, Kansas City, Missouri. In addition, the document describes and compares other alternatives analyzed for this Site. This document is issued by the U.S. Environmental Protection Agency (EPA), the lead agency for site activities, and the Missouri Department of Natural Resources (MDNR), the support agency for site activities. EPA, in consultation with MDNR, will select a final response action to be implemented at the Site only after the public comment period has ended and the information submitted during this time has been reviewed and considered.

EPA is issuing this document as part of its public participation responsibilities under Section 113(k) of the Comprehensive Environmental Response, Compensation and Liability Act, as amended (CERCLA or the Superfund Law), and Section 300.415(n) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). This document summarizes information that can be found in greater detail in the Engineering Evaluation/Cost Analysis (EE/CA), the Site Characterization Report and other site related documents contained in the Administrative Record (AR) file for this Site. EPA and MDNR encourage the public to review these documents in order to gain a more comprehensive understanding of the Site and Superfund activities that have been conducted there. The AR file, which contains the information upon which the selection of the response action will be based, is available at the following locations:

EPA Region VII Docket Room
901 N. 5Th Street
Kansas City, Kansas 66101
(913) 551-7343
Hours: Mon.-Fri., 7:30 am to 5:00 pm

Kansas City, Missouri Public Library
311 East 12th Street
Kansas City, Missouri 64106

The 30 day public comment period begins June 8, 2000, and closes July 10, 2000. A public availability session will be held June 20, 2000, from 4:00 p.m. to 7:00 p.m., at the Hyatt Regency Crown Center, Fremont Room, 2345 McGee Street, Kansas City, Missouri, to solicit comments and answer questions about this Site and the preferred option presented in this document. EPA, in consultation with MDNR, may modify the preferred option or select another response action presented in this document and the EE/CA based on new information or public comments. Therefore, the public is encouraged to review and comment on all the alternatives presented in this document.

Background

PCB Treatment, Inc. (PCB, Inc.) was authorized to treat and dispose materials containing polychlorinated biphenyls (PCBs). Historically, PCBs were commonly used as coolants and lubricants in transformers, capacitors, and other electrical equipment. The manufacture of PCBs stopped in the United States in 1977 because of evidence that they build up in the environment and cause harmful effects. Typical products that contain PCBs include old fluorescent lighting fixtures, electrical appliances, and certain hydraulic fluids. Human exposure to PCBs has been linked to adverse health effects. PCB, Inc. had a permit issued by the EPA to treat PCBs to render them non-toxic.

The building at 2100 Wyandotte Street is contaminated with PCBs at concentrations exceeding health-based levels, resulting from the past activities of PCB Treatment, Inc. While the activities that caused the contamination at the Wyandotte Street building are no longer occurring, there is residual contamination at high levels and there are businesses operating in the adjacent buildings today. The Wyandotte Street building is located in an area that is primarily industrial but includes residences. The area is targeted for urban redevelopment which will include commercial and residential areas. This Site is not on the National Priorities List[1].

PCB, Inc. began operations at 2100 Wyandotte Street, Kansas City, Missouri, during 1982. A portion of the operation was moved to 45 Ewing Street, Kansas City, Kansas, during September 1984 (See Figures 1-1 and 1-2 for a more precise location of the facility). PCB, Inc. continued operations at both facilities through 1986. During this time period, PCB, Inc. operated under other names which included: PCB, Inc. of Missouri; PCB, Inc. of Kansas; Environmental Resource Management, Inc. (ERMI); PCB, Inc.; and Envirosure (which acted as a marketing arm for the company).

Customers of PCB, Inc. included the federal government, rural electric cooperatives, utility companies, cities, states, and large and small businesses. During its period of operation, approximately 1,500 parties shipped materials containing PCBs to the Site, including transformers and capacitors. These items contained PCB levels ranging from slightly greater than 50 parts per million (ppm) to nearly 100% PCBs. The total weight of materials sent to PCB, Inc. for treatment and disposal was in excess of 25 million pounds.

PCB, Inc. was issued a Notice of Violation and assessed a monetary penalty after EPA inspected the facility in 1985 pursuant to its authority under the Toxic Substances Control Act (TSCA). The permit to treat and dispose of PCBs was issued for a time period of three years. The EPA denied renewal of the permit when it expired in 1986. The EPA required that PCB,

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[1] The National Priorities List, a list of Superfund sites compiled by EPA, prioritizes the sites for the purpose of funding long-term remedial evaluation and response.

Inc. pay a monetary penalty and clean the structures at 2100 Wyandotte and 45 Ewing Streets to provide a "clean" closure of the facility. Efforts were made to clean both structures; however, these clean-ups failed to attain residual PCB concentrations within the buildings or in the exterior soils required by the TSCA Spill Policy.

The PCB, Inc. Site was referred to the Superfund program during early 1995. Information request letters were sent to the building owners, pursuant to Section 104 of CERCLA during May 1995. Approximately 1,250 former PCB, Inc. customers were issued information request letters during August 1995. Notice letters, which formally notify the recipient of potential Superfund liability in connection with the Site, were sent to approximately 1,200 former customers. Additional information request letters with a notice of liability were sent during 1997 to newly identified PCB, Inc. customers. It is estimated that an additional 500 information request/notice letters were sent during 1997. The information provided in the individual responses has been used, along with records obtained from PCB, Inc., to develop a database of information that will be used to assess responsibility for costs associated with cleanup of the PCB, Inc. Site.

A group of former PCB, Inc. customers met with EPA during 1995. The group volunteered to perform characterization of the PCB, Inc. facilities and to evaluate possible methods to address the contamination found within the structures and in the exterior soils. The agreement was incorporated into an Administrative Order on Consent (AOC). The work performed under the AOC was completed in May 2000 and included the preparation of the EE/CA, which evaluated and compared response alternatives. The EPA has provided oversight for all work required by the AOC, and has reviewed and approved the EE/CA. The EPA has also prepared an Addendum to the EE/CA which relates solely to the Wyandotte Street building. This document presents the results of the EE/CA, as well as EPA's preferred response action for the Wyandotte Facility. A separate document presents the EE/CA results and recommendations for the Ewing Street Facility.

Opportunity to settle with EPA, either as a *de minimis* or non-*de minimis* party, will be provided to all former PCB, Inc. customers after the public comment period closes and EPA selects a response action for the PCB, Inc. Site. All parties are hereby given notice of EPA's preferred response action and associated costs prior to the actual decision-making, and are being afforded the opportunity to comment on the proposed decision.

Present Occupants

The building at 2100 Wyandotte Street is currently occupied on three floors by two firms. Rossi Lithography occupies the 2nd and 5th floors. Swift Chemical (janitorial supplies) occupies the 4th floor. Both firms have been cooperating with EPA by granting access. They are aware of the PCB contamination. Both parties lease space from the owner, Genova Enterprises, Inc.

Summary of Site Risks

In August 1999 the Site Characterization Report was completed. This report concluded that all floors of the Wyandotte Street Facility are contaminated with PCBs at concentrations above health base levels. The contamination extends to stairwells, basement and exterior areas, including soils. PCB concentrations up to 25,000 ppm have been detected at the Wyandotte Street Facility. Exceedances were also found on all floors, with the third being the most heavily contaminated. No PCBs were detected in groundwater. The action level for PCBs (the point at which EPA requires a response action to protect human health and the environment) at the Wyandotte facility is one ppm. A response action is clearly necessary to provide protection of human health and the environment.

The table below presents the PCB clean up levels that are risk-based and specific to this Site. These clean up levels are based on a residential/commercial use of the Site.

Sample Type	Clean Up Level	Source
Wipe (surface concentration)	1 microgram per hundred square centimeter (ug/100 cm^2)	Minimum Detection Limit (MDL)
Air (air concentrations)	0.5 ug/m^3	MDL
Bulk Concrete (concentrations within concrete)	1 milligram/kilogram (mg/kg)	Toxic Substance Control Act
Segregation and disposal Value for Bulk Concrete (top one inch)	50 mg/kg	Toxic Substance Control Act
Soil (top 10 inches)	1 mg/kg	40 CFR Part 761.125 (c)(4)(v)
Soil (depths greater than 10 inches)	10 mg/kg	40 CFR Part 761.125 (c)(4)(v)

Chemistry/Toxicology

PCBs do not burn easily and are, therefore, good insulating material. They were used as coolants and lubricants in transformers, capacitors, and other electrical equipment. The manufacture of PCBs stopped in the United States in 1977 because of evidence that they build up in the environment and cause harmful effects. Products containing PCBs are old fluorescent lighting fixtures, electrical appliances containing PCB capacitors, old microscope oil, and hydraulic fluids.

People exposed to PCBs in the air for a long time have experienced irritation of the nose and lungs, and skin irritations, such as acne and rashes. It is not positively known whether PCBs cause cancer in people. In a long-term study, PCBs caused cancer of the liver in rats that ate certain PCB mixtures. The U.S. Department of Health and Human Services has determined that PCBs may reasonably be anticipated to be carcinogens.

Engineering Evaluation/Cost Analysis

The EE/CA was completed in May 2000. The EE/CA is a focused feasibility study to evaluate the response alternatives to clean up the facility. EPA amended the EE/CA in June 2000 to include costs of moving the tenants to another location. After screening potential response actions, the following technologies were selected for evaluation:

Building Alternative 1 - No Action (required by EPA guidance)
Building Alternative 2 - Chemical Treatment and Future Demolition
Building Alternative 3 - Demolition and Disposal

In a similar fashion, the following technologies were selected for the soil contamination:

Soil Alternative 1 - No Action (required by EPA guidance)
Soil Alternative 2 - Excavation and Disposal

Building Alternative 1 - No Action

Capital Cost: $0
Annual Operation and Maintenance Cost: $0
Total Costs: $0

The Superfund program requires that the "no action" alternative be evaluated at every site to establish a background for comparison. Under this alternative, the Site would be left as is.

Building Alternative 2 - Chemical Treatment and Future Demolition

Capital Cost: $4,956,000
Annual Operation and Maintenance Cost: $246,000
Future Demolition: $11,682,000
Total Cost: $16,884,000

To implement this response action, the building surfaces would be cleared of all debris, the building tenants removed from the building, all delamination repaired, and the floors repaired to their original elevation. The floors would be sealed to prevent wicking[2] of any

[2] Wicking refers to the movement of fluids (including PCBs and oil) in the building surfaces including floors, walls, and stairwells. This is similar to the the movement of oil through the wick of an oil lamp.

remaining PCB contamination. (Wicking impacts the long-term effectiveness of this response.) All surfaces would be chemically treated to extract the PCBs. Multiple applications would probably be needed to meet clean up levels. Waste water would require treatment prior to discharge.

When the building is subsequently demolished at the end of its useful life, building materials will need to be disposed of at a controlled landfill to prevent exposure to PCBs at depth which were not removed in the cleaning phase.

Building Alternative 3 - Demolition and Disposal

Capital Cost: $12,834,000
Annual Operation and Maintenance Cost: $0
Future Demolition: $0
Total Cost: $12,834,000

This alternative provides for the building to be demolished, and building materials to be segregated and properly disposed of. Building materials, including the storage tank located in the building basement, would be disposed of at an appropriate disposal facility, and the lot would be filled with clean soil and graded. Demolition of the building would be achieved using conventional construction equipment. It is anticipated that the building would be dismantled in order to control potential exposure and contaminant transport by fugitive dust emissions that could be generated by traditional demolition methods.

Soil Alternative 1 - No Action Alternative

Capital Cost: $0
Annual Operation and Maintenance Cost: $0
Total Costs: $0

The Superfund program requires that the "no action" alternative be evaluated at every site to establish a background for comparison. Under this alternative, no action would be taken and the site left as is.

Soil Alternative 2 - Soil Excavation and Disposal Alternative

Capital Cost: $343,0000
Annual Operation and Maintenance Cost: $0
Total Costs: $343,000

This alternative provides for excavation of contaminated surface soil to a minimum depth of one foot. Excavated soil would be hauled to an appropriate disposal facility. Excavation would be implemented using conventional construction equipment and excavation procedures.

Comparison of Alternatives

Consistent with EPA's Guidance on Conducting Non-Time Critical Response Actions, the response action alternatives were evaluated on the basis of effectiveness, implementability, and cost. This section profiles the performance of the preferred alternative against these criteria. For a graphical presentation of the comparison, see Table 5-2 from the EE/CA which is attached.

I. Effectiveness

Building Alternative 1 and Soil Alternative 1 are not protective of human health or the environment. Because no actions would occur under Building Alternative 1 and Soil Alternative 1, potential exposure to contaminants would continue. Building Alternatives 2 and 3 protect human health by removing exposure. The overall protection of Building Alternative 2 is dependant upon the successful application and reliability of solvent extraction and encapsulation. Building Alternative 3 would remove the contamination, thereby eliminating the potential for continued exposure.

Soil Alternative 1 is not protective of human health or the environment since soils exceeding health-based levels would remain in place. Soil Alternative 2, provides overall protection by removing soils with contaminant concentrations exceeding health-based risk levels.

Short-term effectiveness is a measure of the risks posed to the community and workers during construction of the remedy and the time until removal objectives are achieved. The risk to community and workers would be minimal for all alternatives. Residents could potentially be exposed to contaminated dust during demolition and excavation activities (Building Alternative 3 and Soil Alternative 2) but these risks would be controlled by utilizing demolition techniques designed to minimize dust generation, and further controlled through the use of dust suppressants. The risk to site workers would be controlled by proper use of personal protection equipment and monitoring during site activities in accordance with an approved health and safety plan.

Any compromise of the buildings structural support would also represent a potential physical hazard. Building Alternative 1 would leave the building in place in a continual deteriorating state. Building Alternative 2 would attempt to restore the building's integrity by repairing areas that have been affected by natural deterioration or attempted response efforts. Building Alternative 3 would remove any potential physical hazard through the removal of the building itself.

II. Implementability

All the alternatives are technically and administratively feasible. The materials and services needed to implement these alternatives are readily available. There is some uncertainty, however, whether the structural integrity can be restored through the necessary repair work included under Building Alternative 2. If the integrity of the structure cannot be restored, then attempts to encapsulate the contamination within the surfaces of the structure will also have limited success.

The MDNR has been consulted and agrees with the proposed response action.

III. Cost

No costs are associated with Building Alternative 1 and Soil Alternative 1. Costs associated with Building Alternative 2, Chemical Treatment of the Building and Encapsulation, would be more than Building Alternative 3, demolition. All estimates are within 50% over or 30% under for accuracy and, therefore, should be considered only indicative of what actual costs might be.

IV. Applicable or Relevant and Appropriate Regulations (ARARS)

The NCP requires removal actions to meet ARARs to the extent practicable. All the alternatives, except Building Alternative 1 and Soil Alternative 1 will meet ARARs. ARARS include state and federal environmental regulations and laws including air regulations, PCB regulations, transportation regulations, land disposal regulations as well as solid waste regulations.

Summary of Preferred Alternative

Building Alternative 3, Demolition and Disposal, is the preferred alternative for the building. Building Alternative 3 offers a high degree of protectiveness and addresses long-term effectiveness and exposure concerns while addressing the issues of PCB concentrations at depth within the concrete.

Building demolition is technically feasible and practical. There are proven techniques for building demolition that could be safely implemented. It is unlikely that the building would be demolished by implosion or wrecking ball because of the potential to generate PCB-laden dust.

A more controlled means of demolition would be required, such as cutting the structure into pieces from the top floor. A controlled misting operation would be used in conjunction with the saw cutting to control dust. A misting attachment would be placed on water lines providing water to the work area to create a fine mist. This would precipitate any dust generated while limiting the volume of water applied. A partial enclosure may be used around the misting area

to collect any excess water. The demolition contractor will be required to follow applicable storm water discharge and air emission regulations to control water discharges and air emissions.

The demolition alternative becomes more favorable when areas of the building are contaminated with PCBs to the extent that contamination renders cleaning technologies ineffective or when the cost to clean and/or reconstruct the building exceeds the value of the building. The preferred option would provide a permanent response and eliminate any future risk associated with the Site. The demolition alternative is the only response action option identified that would provide a permanent response and could be demonstrated to achieve the cleanup goal for the Site. The demolition option would eliminate the risk of failure and uncertainty associated with other available options.

EPA added moving costs for tenants to the EE/CA in an Addendum. These costs add $1,400,000 to the final cost, so the total is $14,234,000.

Soil Alternative 2, Excavation and Disposal, is the preferred alternative for contaminated soil at the Site. Using common construction techniques and equipment, the soil would be excavated to at least a depth of one foot. It would be segregated based on contaminant levels and disposed of offsite at either a sanitary landfill or a TSCA landfill.

Opportunities for Community Involvement

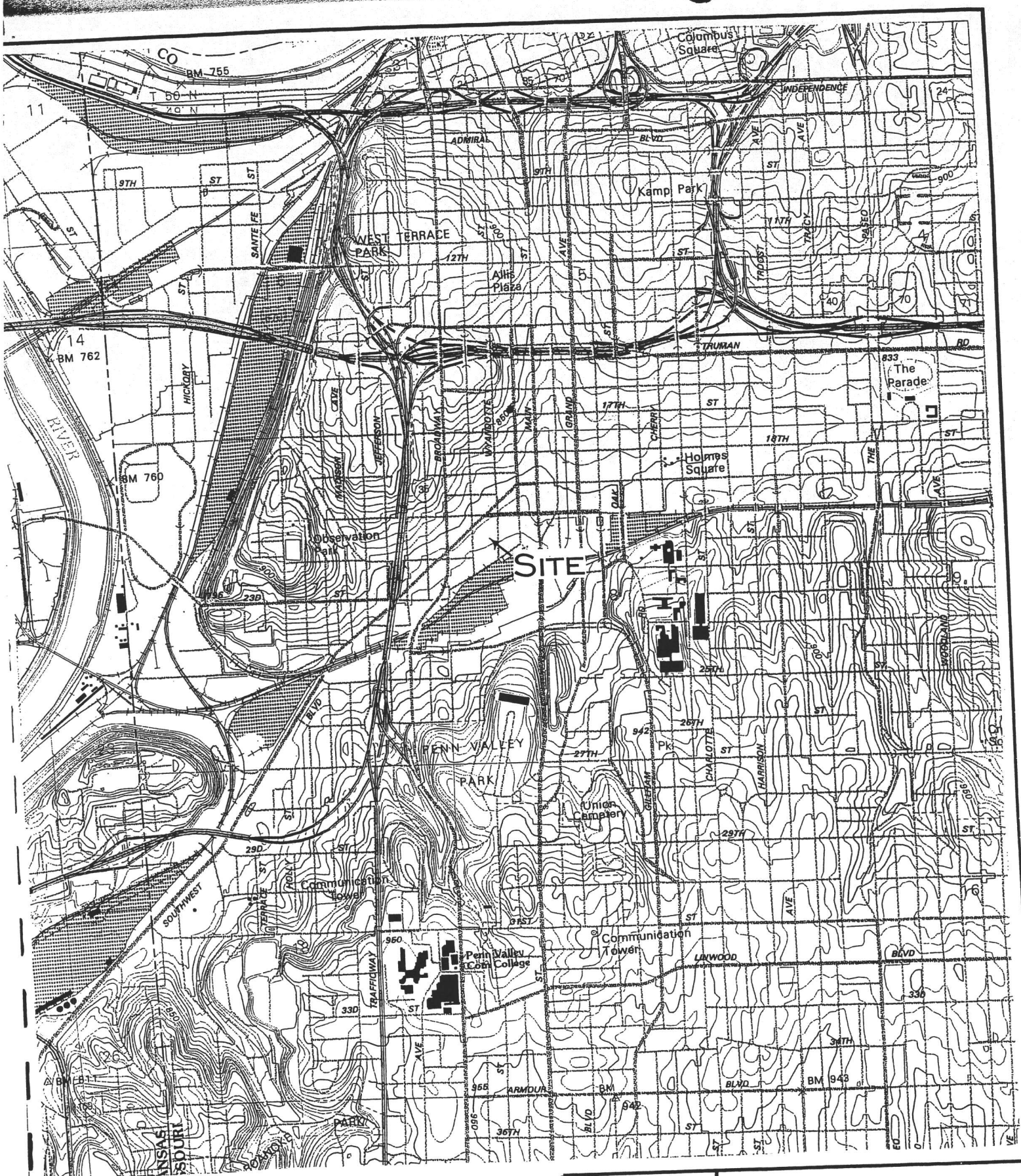
EPA solicits input from the community on the response action proposed for the Wyandotte Street building. EPA has set a public comment period from June 8 through July 10, 2000, to encourage public participation in the selection process. The comment period includes a public availability session at which EPA, with MDNR and Kansas Department of Health and Environment, will discuss the Preferred Alternative, answer questions, and accept both oral and written comments.

The public availability session is scheduled for 4:00 p.m. to 7:00 p.m., June 20, 2000, and will be held at the Hyatt Regency Crown Center, Fremont Room, 2345 McGee Street, Kansas City, Missouri.

Comments will be summarized and responses provided in the Responsiveness Summary . After the Responsiveness Summary has been prepared, EPA, in consultation with MDNR, will finalize the decision on the preferred alternative in an Action Memo. To send written comments or obtain further information, contact:

Pauletta France-Isetts
Paul W. Roemerman
U.S. Environmental Protection Agency - Region VII
901 N. 5th Street
Kansas City, Kansas 66101
(913) 551-7694 or toll free 1(800) 223-0425
between 8:30 a.m. and 4:30 p.m. Monday through Friday

Although we attempt to weigh all considerations when proposing a preferred response action, it is not always possible for us to know about all the community's concerns. Thus, we invite your participation by submitting your comments in writing or by attending the upcoming public availability session.



Burns & McDonnell
SINCE 1898

Figure 1-1
Site Location Map
PCB INC
2100 Wyandotte Street

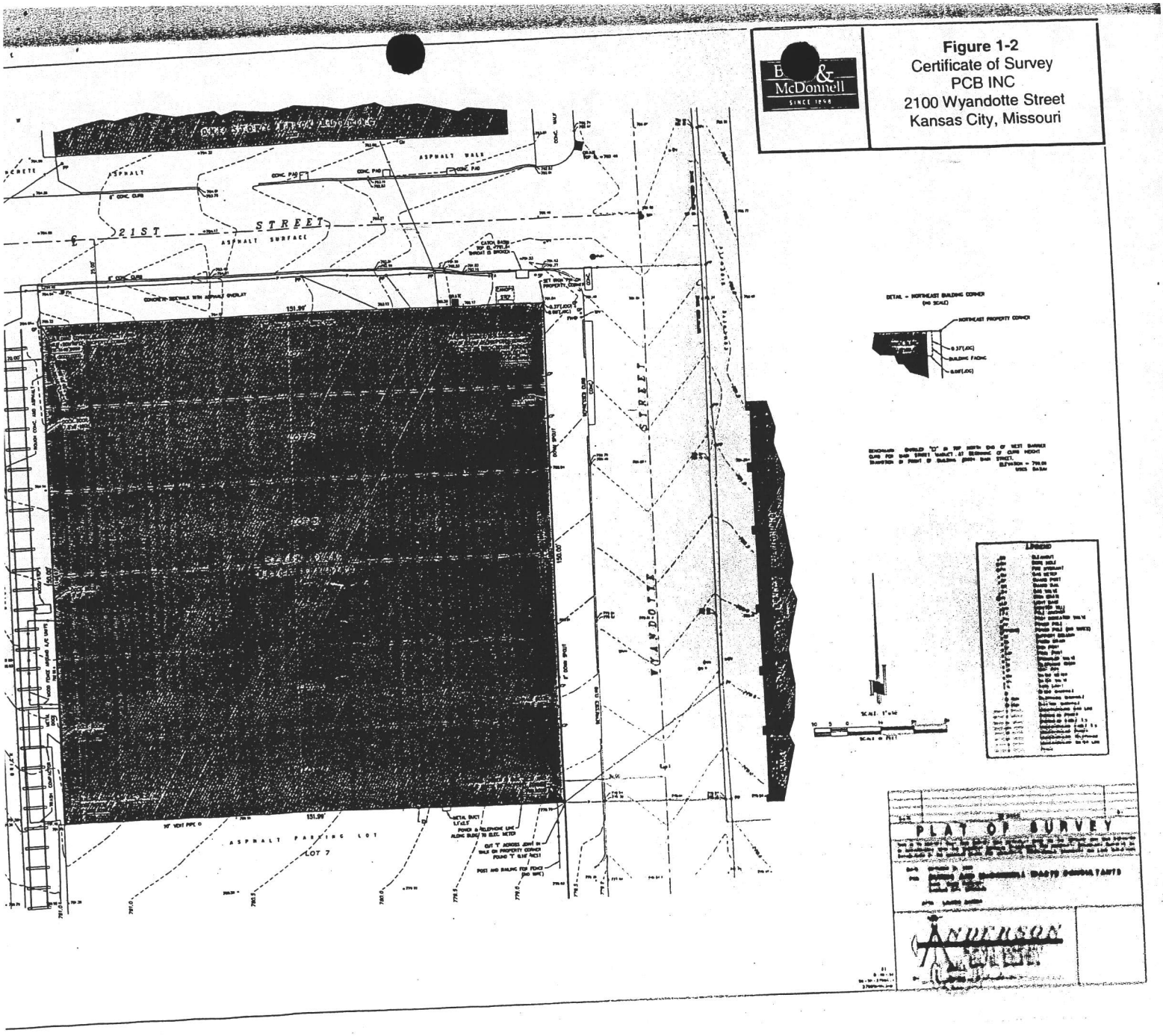


Figure 1-2
Certificate of Survey
PCB INC
2100 Wyandotte Street
Kansas City, Missouri

Table 5-2
Summary of Alternative Comparative Analysis
PCB Treatment Inc.
2100 Wyandotte Street

Alternative Criteria	Building Removal Alternatives			Soil Removal Alternatives	
	No Action	Chemical Treatment & Future Demolition	Demolition and Disposal	No Action	Excavation and Disposal
Protective to Human Health and The Environment	1	2	3	1	3
Reduction of Toxicity, Mobility, or Volume	1	3	2	1	2
Compliance with ARARs	1	1	3	1	3
Short-term Effectiveness	1	3	3	1	3
Long-term Effectiveness	1	1	3	1	3
Technical Feasibility	3	3	3	3	3
Availability of Goods and Services	3	3	3	3	3
Administrative Feasibility	1	2	2	1	2
Maintenance Requirements	3	1	3	3	3
Total Points	15	19	25	15	25
Capital Cost	-	$4,956,000	$10,529,000 to $12,834,000	-	$344,000
Annual O& M Cost	-	$246,000	-	-	-
Future Capital Cost	-	$11,682,000	-	-	-
Total Present Worth Cost	-	$16,884,000	$10,529,000 to $12,834,000	-	$344,000

Notes:
1 - Low Effectiveness
2 - Moderate Effectiveness
3 - High Effectiveness